The Remainder

video installation, animated loop full HD, 2014

The regular pentagon is a unique figure – the ratio of its side to its diagonal is equal to the irrational "golden number" φ (phi). Irrational numbers cannot be expressed as fractions (the ratio of two integers) – they can only be approximated. The famous Euclidean algorithm, which aims to "find the common measure of two segments," will stop after a finite number of steps in the case of rational proportions, when the difference between two consecutive segments will finally be 0. However, in the case of incommensurable segments, such as the side and diagonal of a regular pentagon, the algorithm will never end – there will always be a non-zero remainder left over.

Thanks to the animated loop, we can observe how the immeasurable ratio of the side and the diagonal of a regular pentagon is constantly renewed in subsequent scales. This moving image clearly shows the inseparable relationship between irrationality and infinity.